

In the claims:

Claims 1-18 cancelled.

19. (currently amended) A wiper blade for windows, comprising:  
at least one support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18), wherein the support element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, wherein the support element (12) has a cross sectional profile in which

$$\frac{F_{wf} * L^2}{48 * E * I_{zz}} < 0.009,$$

where  $F_{wf}$  is an actual contact force exerted on the wiper blade by the wiper arm (18) ~~or is a contact force for which the wiper blade was originally designed~~ in condition when it is pressed against a window, L is a length of the support element (12), E is an elasticity modulus of the support element (12), and  $I_{zz}$  is a moment of inertia of a cross sectional profile around a z-axis perpendicular to an s-axis, which adapts along with the support element (12), and perpendicular to a y-axis, wherein the support element (12) has a

substantially rectangular cross sectional profile (40), with a substantially constant width b and a substantially constant thickness d.

20. (Previously presented) The wiper blade according to claim 19, wherein

$$\frac{F_{wf} \cdot L^2}{48 \cdot E \cdot I_{zz}} < 0.005.$$

Claim 21 cancelled.

22. (Previously presented) The wiper blade according to claim 19, wherein the support element (12) is comprised of at least two individual bars (42, 44) and wherein widths (b1, b2) of the individual bars (42, 44) add up to a total width b.

Claims 23-24 cancelled.

25. (Previously presented) A wiper blade for windows, comprising: at least one support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18), wherein the support element (12) is an

elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached,

wherein the support element (12) has a cross sectional profile (40) which produces a lateral deflection angle of at least one of the support element ends in relation to a longitudinal span of the support element of  $\gamma < 0.5^\circ$  against the window (26), when the wiper blade is moved on the window (26) lateral to its longitudinal span, and the friction coefficient between the window (26) and the wiper strip (14) is approximately 1, wherein the support element (12) has a substantially rectangular cross sectional profile (40), with a substantially constant width  $b$  and a substantially constant thickness  $d$ .

26. (Previously presented) A wiper blade for windows, comprising: at least one support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18), wherein the support element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, wherein the support element has a length  $L$ , a width  $b$ , and a thickness  $d$  such that

$$20L^2 < bd^2 < 40L^2$$

in which  $L$  is given in meters and  $b$  and  $d$  are given in millimeters, wherein the support element (12) has a substantially rectangular cross

sectional profile (40), with a substantially constant width  $b$  and a substantially constant thickness  $d$ .

27. (Previously presented) The wiper blade according to claim 26, wherein the support element is comprised of two spring bars, wherein each spring bar has a width and wherein the widths of the spring bars are added together.

28. (Previously presented) A wiper blade for windows (15), comprising:

at least one elongated support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18) which presses the wiper blade (10) against the window (15) in an operating position, wherein the support element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, and which has a curvature when it is not loaded by the wiper arm (18), wherein the curvature along a coordinate  $(s)$ , which follows a longitudinal span of the support element (12), has values such that a second derivative of the curvature as a function of this coordinate  $(s)$  is essentially proportional to a contact force distribution  $p(s)$ , which is produced when the wiper blade (10) is pressed against a flat window (15), and wherein the contact force distribution decreases toward at least one end,

wherein the support element (12) has a substantially rectangular cross sectional profile (40), with a substantially constant width  $b$  and a substantially constant thickness  $d$ .

29. (Previously presented) The wiper blade according to claim 28,

wherein

$$\frac{d^2 K(s)}{ds^2} = \frac{d^2 M(s)}{ds^2} * E * I = \frac{p(s)}{E * I}$$

$s$  = coordinate along the support element

$K(s)$  = curvature of the support element

$M(s)$  = bending moment

$E$  = elasticity modulus

$I$  = surface moment of inertia of the support element in relation to a neutral axis

$p(s)$  = specific force per unit length = contact force distribution

30. (Previously presented) A wiper blade for windows (15),

comprising:

at least one elongated support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18) which presses the wiper blade (10) against the window (15) in an operating position, wherein the support

element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, and which has a curvature when it is not loaded by the wiper arm (18), wherein the curvature along a coordinate (s), which follows a longitudinal span of the support element (12), has values such that a second derivative of the curvature as a function of this coordinate (s) minus the second derivative of the curvature of the window (15) decreases from a middle region (40) toward end regions, wherein the support element (12) has a substantially rectangular cross sectional profile (40), with a substantially constant width b and a substantially constant thickness d..

31. (Previously presented) The wiper blade according to claim 30, wherein the middle region (40) is a location of the connecting device (16).

32. (Previously presented) The wiper blade according to claim 30, wherein

$$\frac{d^2 K(s)}{ds^2} = \frac{p(s)}{E * I} + \frac{d^2 K_{window}(s)}{ds^2}$$

s = coordinate along the support element

K(s) = curvature of the support element

$M(s)$  = bending moment

$E$  = elasticity modulus

$I$  = surface moment of inertia of the support element in relation to a neutral axis

$p(s)$  = specific force per unit length = contact force distribution

33. (Previously presented) A wiper blade for windows (15), comprising:

at least one elongated support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18) which presses the wiper blade (10) against the window (15) in an operating position, wherein the support element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, and which has a curvature when it is not loaded by the wiper arm (18), wherein the curvature along a coordinate  $(s)$ , which follows a longitudinal span of the support element (12), has values such that a contact force distribution  $p(s)$ , which prevails when the wiper blade (10) is pressed against a flat window (15) is greater in a region (40) approximately halfway between a center and an end of the wiper blade (10) than it is at the end of the wiper blade (10), wherein the support element (12) has a substantially rectangular cross sectional profile (40), with a substantially constant width  $b$  and a substantially constant thickness  $d$ .

34. (Previously presented) A wiper blade for windows (15), comprising:

at least one elongated support element (12), a wiper strip (14), and a connecting device (16) for a wiper arm (18) which presses the wiper blade (10) against the window (15) in an operating position, wherein the support element (12) is an elongated, flat bar to which the wiper strip (14) and the connecting device (16) are attached, and which has a curvature when it is not loaded by the wiper arm (18), wherein the curvature along a coordinate (s), which follows a longitudinal span of the support element (12), has values such that a contact force distribution  $p(s)$ , which prevails when the wiper blade (10) is pressed against the window (15) to be wiped, is greater in a region approximately halfway between a center and an end of the wiper blade (10) than it is at the end of the wiper blade (10), wherein the support element (12) has a substantially rectangular cross sectional profile (40), with a substantially constant width  $b$  and a substantially constant thickness  $d$ .

35. (Previously presented) A method for producing a wiper blade assembly according to claim 19, comprising the following steps:

determining the length  $L$  and adapted contact force  $F_{wf}$  required for the window to be wiped,

determining a width  $b$  and a thickness  $d$ ,



determining a curvature progression  $K(s)$ ,  
bending the support element,  
connecting the supporting element, wiper strip, and connecting device.

36. (Previously presented) The method according to claim 35, comprising the following steps:

- determining the length  $L$  and the cross sectional profile, particularly the width  $b$  and the thickness  $d$  by means of experimental values,
- determining a contact force  $F_{wt}$  and a contact force distribution  $p$  for a flat window, which assures a favorable wiping quality, likewise by means of experimental values,
- measuring the curvature progression  $K_{window}$  of the window,
- double derivation of this curvature progression  $K_{window}$  of the window as a function of a coordinate that adapts along with the curvature,
- calculating the second derivative of the curvature progression  $K(s)$  of the support element according to an above relation,
- double integration yields a desired curvature progression  $K(s)$  of the support element.

37. (Previously presented) The wiper blade according to claim 25, wherein the longitudinal span is  $< 0.3^\circ$ .